

13B. Leak Tests

Regulations: 180 NAC 1-006, 180 NAC 1-011.

Criteria: *The Agency requires licensee to perform a leak test to determine whether or not there is any leakage from the radioactive source in the device. The Agency finds testing to be acceptable if it is conducted by an Leak Test vendor that has been approved by the Agency, the U.S. Nuclear Regulatory Commission or other Agreement State.*

The leak test is typically performed at 6 month intervals or alternative intervals offered by the Agency, NRC or Agreement State as specified in the SS & D regulation sheet. The measurement of the leak-test sample is a quantitative analysis requiring that instrumentation used to analyze the sample be capable of detecting 185 becquerels (0.005 microcurie) of radioactivity.

Options for leak testing are:

- (1) Manufacturers, consultants, and other organizations may be authorized by the Agency, the U.S. Nuclear Regulatory Commission or other Agreement State.
- (2) Use a commercial leak test kit. The licensee is expected to take the leak test sample according to the gauge manufacturer's and the kit supplier's instructions and return it to the kit supplier for evaluation and reporting results.
- (3) Licensees may also be authorized to conduct the entire leak test sequence themselves.

Response from Applicant:

- “Leak tests will be performed at 6 month intervals or approved by the Agency, an Agreement State, or the U.S. Nuclear Regulatory Commission and specified in the Sealed Source and Device Registration Sheet.”

And

- “Leak tests will be performed by an organization authorized by the Agency, an Agreement State or the U.S. Nuclear Regulatory Commission to provide leak testing services for other licensees and/or using a leak test kit supplied by an organization authorized by the Agency, an Agreement State or U.S. Nuclear Regulatory Commission to provide leak test kits to other licensees and according to the kit supplier's instructions.”

Name of licensee and license # performing maintenance:

And/Or

Supplier of leak test kit: _____

Model number of kit _____

Suppliers Address _____

Or

- “The licensee may be authorized to conduct the leak test and analysis by the Agency.”
Note: Appendix L in Regulatory Guide 3.4 “Radioactive Material Guidance for Portable Gauges and X-ray Fluorescence Analyzers,” indicates the criteria and procedure for in house leak testing.